

CLAIMS

1. Method for producing slabs in a continuous casting installation (10) with an oscillating casting mold (11) and a downstream strand guide (20, 22, 23) below it, in which the cast strand (12) is bent from the vertical casting direction into the horizontal rolling direction and during this process is supported and conveyed by driver rolls (21, 24), which are arranged opposite each other in pairs, are adjusted relative to each other with well-defined contact force and can be combined into segments, wherein the cast strand (12), while it is still within the continuous casting installation (10) in the area of the straightening driver rolls (24), is deformed by at least one reducing stand (30) to a reduced strand (12') with a reduced thickness relative to its cast state, after which the continuous reduced strand (12') is cut into slabs (12''), which are conveyed to a soaking furnace (40) and then to a rolling mill, characterized by the fact that the deformation of the cast strand (12) to the reduced strand (12') is carried out at an early point in time after its complete solidification at a

surface temperature on the order of 1,000°C in such a well-defined way with high energy input and low thickness reduction of, for example, a maximum of 7 mm at a cast strand thickness of 50 mm that

- the depth of the oscillation marks (17) present in the surface (16) of the cast strand is reduced, and
- as a result of the introduction of the higher energy state into the deformed surface zone (18') of the reduced strand (12'), whose effect extends as far as the region of the aligned dendrites, the original finely crystalline structure of the surface zone (18) of the cast strand (12) is partially recrystallized in a small inner zone (19) in such a way that this zone (19) then expands into a completely recrystallized surface zone (19') of the slab (12'') in the subsequent heat treatment in a soaking furnace (40).

2. Method in accordance with Claim 1, characterized by the fact that the deformation is carried out with one or more reducing stands (30) with roll diameters of 600 to 900 mm, and preferably with a roll diameter of 700 mm, for the reduction of a cast strand 50 mm thick by a maximum amount of 7 mm.

3. Method in accordance with Claim 1 or Claim 2, characterized by the fact that the desired preliminary section can already be exactly adjusted in the continuous casting installation with the reducing stand (30) by preshaping its rolls (31) and by feedback of the rolling parameters to be set with the downstream rolling mill.

4. Method in accordance with Claim 1, Claim 2, or Claim 3, characterized by the fact that, when several reducing stands (30) are used, only a slight reduction of the cast strand (12) with high dimensional accuracy of the desired preliminary section or reduced strand (12') is carried out with the last pair of rolls (31).